AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below. A complete listing of the claims, including their current status, is set forth below.

1-28. (Cancelled)

29. (Previously presented) An isolated polynucleotide, wherein said polynucleotide comprises a nucleic acid sequence encoding a G protein-coupled receptor comprising the amino acid sequence of SEQ ID NO: 16.

30-41. (Cancelled)

42. (Currently amended) An isolated polynucleotide **comprising** ~~according to claim 29, wherein~~ the ~~nucleic acid~~ **nucleotide** sequence **of** ~~is~~ SEQ ID NO: 15.

43. (Cancelled)

44. (Currently amended) An isolated polynucleotide, wherein said polynucleotide comprises a nucleic acid sequence encoding **a** ~~an endogenous human~~ G protein-coupled receptor, **wherein said G protein-coupled receptor comprises an amino acid sequence that is at least 90% identical to SEQ ID NO:16 and wherein said G protein-coupled receptor is capable of stimulating intracellular IP_3 accumulation in a constitutive manner** ~~said nucleic acid sequence amplifiable by a process comprising performing polymerase chain reaction (PCR) on a human cDNA sample using a specific primer that consists of the nucleotide sequence set forth in SEQ ED N0:41 and a specific primer that consists of the nucleotide sequence set forth in SEQ IDNO:42, wherein the process is RT-PCR~~.

45. (Currently amended) An isolated polynucleotide according to claim 44, wherein **said G protein-coupled receptor comprises an amino acid sequence that is at least 95% identical to SEQ ID NO:16** ~~the endogenous G protein-coupled receptor exhibits expression in thalamus and increases an intracellular level of IP_3 when stimulated~~.

46. (Currently amended) A vector comprising a polynucleotide according to any one of claims **29, 42, 44 or 45** ~~29, or 41 to 45~~.

47. (Previously presented) A vector according to claim 46, wherein said vector is an expression vector.

48. (Previously presented) A host cell comprising an expression vector according to claim 47.

49. (Currently amended) **The host** ~~A host~~ cell according to claim 48, wherein the host cell is mammalian.

50. (Currently amended) **The** ~~A mammalian~~ host cell according to claim 49, wherein the mammalian host cell is selected from the group consisting of **a** 293 cell, **a** 293T cell, and **a** COS-7 cell.

51. (Currently amended) **The host** ~~A host~~ cell according to claim 48, wherein the host cell is a melanophore cell.

52. (Previously presented) A process for making a recombinant host cell comprising the steps of:

(a) transfecting an expression vector according to claim 47 into a suitable host cell; and

(b) culturing the host cell under conditions which allow expression of a G protein-coupled receptor from the expression vector.

53. (Currently amended) **The process** ~~A process~~ according to claim 52, wherein the host cell is **a** mammalian **host cell**.

54. (Currently amended) **The process** ~~A process~~ according to claim 53, wherein the mammalian host cell is selected from the group consisting of **a** 293 cell, **a** 293T cell, and **a** COS-7 cell.

55. (Currently amended) **The process** ~~A process~~ according to claim 52, wherein the host cell is a melanophore cell.

56. (Previously presented) An isolated membrane of a recombinant host cell according to claim 52, wherein the isolated membrane comprises the G protein-coupled receptor.

57-61. (Cancelled)